



Whitepaper on Offshore Software Development in Russia

Produced by the Information Technologies
and Telecommunications Committee
of The American Chamber of Commerce
in Russia

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Preface

Dear Reader

Thank you for taking an interest in the capabilities of Russian software developers.

Countless personal experiences have reinforced in my mind the expertise, resourcefulness, efficiency and above all, talent, of programmers born and educated in the Soviet Union.

[The American Chamber of Commerce in Russia](#) (Amcham) is devoted to development of bilateral commercial ties between Russia and America. Advocating Russia's outstanding software development capability to American companies is an excellent example of how Amcham serves both Russian and American industry.

We have made our best efforts to include the most current and realistic data in this document. But this industry is moving quickly in Russia and there are new developments each day. If you feel that parts of the whitepaper are not accurate or are out of date, please contact me directly and we'll update it. We intend this whitepaper to be a living document that represents the dynamic nature of the country it promotes.

My sincerest thanks go to the members of the Amcham IT & Telecom Committee mentioned herein who donated their valuable time and expertise to the preparation of this white paper.

Wishing you success,

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[The American Chamber of Commerce in Russia](#)

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Executive Summary

“Offshore Software Development” in the IT world is the term most often used to describe the business of outsourcing software programming and engineering services to contractors or wholly-owned facilities located in foreign countries with lower labor costs. India is the largest provider of such services, estimated to be worth \$6.3 billion in 2000-2001.

The traditional reason for this practice is cost-avoidance in response to a shortage of programmers and the resulting rise in salaries. However in some cases it is also done to gain access to specific technical skills which might not otherwise be available.

Offshore software development activity in Russia has recently enjoyed a surge in interest and activity. It is estimated that there are 5,000 to 8,000 professional programmers in the industry in Russia, and annual revenue is between \$60 million and \$100 million per year, growing at 40% to 60% annually. Many well known multinational technology companies have been vigorously pursuing R&D and software development activities in Russia, including Motorola, Intel, Sun Microsystems, Boeing, and Northern Telecom.

Russia's major advantage over other common offshore software development locales is the technical skills and education of its workforce. Russia has more personnel working in R&D than any other country, and ranks 3rd in the world for per capita number of scientists and engineers. Many of these engineers have solid experience and accomplishments in advanced nuclear, space, military, energy and communications projects. In addition, Russian scientists are very strong in the fields of applied sciences such as mathematics and physics, and the Russian educational system continues to produce highly qualified graduates. Above all, there is still a wealth of undiscovered talent in Russia. Other advantages are labor costs, proximity to western Europe and America, and shared European culture and history enabling better cross-cultural understanding.

Although this industry in Russia is developing rapidly, a number of fundamental drawbacks remain. Most of all is a lack of experience in management of offshore software development processes. Russia has a lack of experienced project managers at all levels of the process from top management to junior project managers. There are very few Russian companies whose project management and quality control processes are certified according to international standards. Language is another distinct disadvantage, as all other major offshore software development locales are English speaking, resulting in a further dependence on project managers who may not be well experienced. Other drawbacks which affect the Russian industry itself are high bandwidth costs and a lack of marketing capability in the U.S. and other target markets.

Finally, there are many legal and regulatory challenges in the areas of intellectual property, export and import, taxation, labor law, business registration, reporting, and currency control. Most of these issues affect only companies who are setting up wholly-owned offshore software development facilities in Russia. Companies using Russian contractors dramatically reduce their legal and regulatory difficulties.

Intellectual property and security are major concerns of companies considering offshore software development in Russia. Thankfully, the laws on intellectual property ownership in Russia are relatively clear and developed. While enforcement of these laws remain a problem for domestic consumer level products (music, movies, clothing), there have been no recorded violations of intellectual property rights in the offshore software development industry. As always, companies can ensure their safety by working with reputable and experienced organizations and contractors.

This industry is sure to continue growing quickly. Russian companies and project managers are quickly gaining experience and many are currently preparing to attain world recognized quality and business process certifications. The window of opportunity to discover and enjoy the work of the best talent in Russia is still open but disappearing quickly.

Offshore Software Development: What is it and why do it?

Offshore development in the IT world is the term most often used to describe the business of outsourcing software programming and engineering services beyond national boundaries. The three most common justifications for offshore development are cost avoidance, internationalization and inadequate supplies of domestic resources.

Cost avoidance is the traditional reason for offshore development. Low-level tasks such as coding and software testing can be performed in less-developed countries at costs as low as ten percent of domestic ones. India has built revenues for this type of outsourcing from \$110 million in 1990¹ to an expected \$6.3 billion in 2000-2001.² Attracted by such huge success, other less-developed countries are attempting to become serious contenders for India's near monopoly.

Software manufacturers seeking international markets and needing to localize their products to specific platforms, languages and cultural requirements often find it most efficient to use offshore development resources in or near their target markets. Ireland, Australia and Finland are in the most demand for this type of outsourcing today. Cost savings from these more-developed countries remain available, but are less dramatic.

The growing shortage of IT professionals, especially in the most developed industrial countries, is rapidly becoming the most important reason for offshore development. For instance, the U.S. Department of Commerce reports that by 2003 there will be a shortfall of some 1.4 million computer programmers in the United States alone.³

Until quite recently the term "offshore development" has been somewhat of a misnomer. Although contracts may exist between an onshore client and an offshore contractor, most of the work has actually been done at the onshore client's site by "consultants." Indian offshore development contractors to U.S. clients, for instance, performed 95% of their work on-site in 1991-1992 and were still doing 58% on-site by 1999-2000.⁴ But as demand for this type of service increases it is being made especially difficult by visa requirements designed to protect domestic workforces. For instance, the United States requires on-site workers to obtain H-1B visas. The global cap on H-1B visas was 65,000 in 1998, was raised to 115,000 during 1999-2000 and there are efforts underway to increase it again to 200,000 for the three-year period 2000 - 2002.⁵

This type of onshore-offshore development is often referred to as "body shopping" or "body shipping." It has allowed companies to access relatively inexpensive, temporary IT resources without the need to negotiate with the individual workers themselves, and with minimum risk. Contracts are with the offshore provider, which remains responsible for most of the employees' support. A significant percentage of these visitors finally immigrate to the target country and many then become full time employees of the companies they have been working with. In the United States the demand for such onsite services far exceeds the supply of H-1B visas.

The biggest barrier against true offshore development is the lack of trust and perception of risk among clients, who are uncertain of the skills, capabilities and credibility of potential sub-contractors. In order to reduce the risk, many clients choose to retain as much control as they can over production, only contracting out the relatively unproblematic tasks of coding and testing, and having the work carried out onsite. Work will only be allowed offshore if there are fairly tight, formalized specifications, but exporters are caught in the bind that such projects are then more amenable to automated software tools.

One way around this problem is the majority ownership and or management control of the offshore development company. A significant number of Fortune 500 companies own such entities in India,

¹ <http://members.tripod.com/~iimc/spm/report.html>

² <http://www.nasscom.org/template/itinindia.htm>

³ <http://www.empowermentzone.com/itworker.txt>

⁴ <http://www.nasscom.org/template/itinindia.htm>

⁵ <http://www.nasscom.org/template/itinindia.htm>

Ireland, Australia and other venues. Another way to avoid risks is to source offshore development services from large, well-established contractors. In India, for example, at least ten percent of the of approximately 600 offshore development companies active there have revenues of at least \$10 million per year.

So there are really three models of offshore software development:

- Contracting: When a company contracts an “offshore” company to provide specific software development services.
- Ownership: When a company sets up a partially or wholly owned subsidiary in an “offshore” locale to directly hire programmers to development software.
- Onshore-Offshore/Body-Shopping: When programmers are sent to the client’s site temporarily to perform programming services, either as direct hires or through a contractor.

This whitepaper will focus only on the first two forms of offshore software development.

The most attractive sources for offshore development are countries with well developed IT support infrastructures. From the bottom up these include favorable demographics and labor costs, competent technical education facilities in national university systems, a well established presence of leading hardware and software platform manufacturers and a favorable Government regulatory environment supporting offshore development activities.

Ireland fits this criteria very well. Demographically, 40% of its population is estimated to be less than 25 years of age. Its twenty universities produce an adequate number of IT professionals to allow Irish offshore development business to grow. Close links between the universities and hardware/software platform manufacturers ensure that graduates are well prepared to begin working when they complete their studies. As a result there are some 550 Irish offshore development companies, 80% of which are Irish owned. Irish Government policies strongly support these developments. Offsetting these advantages are relatively high wage rates. These capabilities translate into 2000 offshore development revenues of over \$6 billion.⁶ Of all packaged software sold in Europe, 40% is produced in Ireland.⁷

India shares most of the same advantages, but with significantly lower wage rates. The Indian government is aggressively helping to develop the offshore development sector, which now accounts for more than 10% of the value of all Indian exports. The Indian National Association of Software and Service Companies (NASSCOM) is one of the strongest industry groups in the World. India has an excellent university support system that works closely with leading hardware and software manufactures. During the year, the number of quality certified software companies from India increased to over 170; Fifteen Indian companies now have the unique distinction of a SEI-CMM Level 5 certification. (Only 23 companies worldwide have achieved level 5 Certification).⁸

Telecommunications facilities in India continue to improve dramatically and the number of high-speed leased lines in use by offshore development companies has increased from 10 in 1992 to more than 1200 (64 KBPS, 2 MBPS) today. Last year more than 185 companies out of the Fortune 500 companies outsourced their software requirements to India from more than 1250 Indian companies engaged in offshore development. The top 25 exporters accounted for an almost 61% share of the I.T. software and services exports revenues in 1999-2000.⁹

There are interesting similarities in terms of India’s IT infrastructures in 1990 and Russia’s in 2000. Russia’s present level of offshore development revenue is approximately the same as India’s ten years ago. Russian IT wage rates are roughly the same as India’s today. And, perhaps most importantly, Russia’s educational infrastructure for producing new generations of IT professionals is among the finest in the world. There is every reason to believe that by the end of the present decade Russia will number itself among the world’s leading offshore development providers.

⁶ <http://members.tripod.com/~iimc/spm/report.html>

⁷ <http://members.tripod.com/~iimc/spm/report.html>

⁸ <http://www.nasscom.org/template/itinindia.htm>. For alternate statistics, please see footnote #12.

⁹ <http://www.nasscom.org/template/itinindia.htm>

Offshore Software Development in Russia

Status

Worldwide, as the demand for programmers has continued to grow faster than the available supply of qualified specialist, companies have been looking for new sources of labor to fill the gap. As the problem has become even more acute in the past few years, Russia has stepped on the world stage as a source of highly skilled, low cost programmers. Until the last few years, the trend was to hire these programmers away from Russia, a trend known as “brain drain.” While this still occurs, increasingly, companies are more interested in harnessing the available labor in Russia without having to relocate staff to outside of Russia.

It is estimated that approximately 5,000 to 8,000 professional programmers are working today in the offshore software development industry in Russia. The total value of the industry is estimated between US\$60 million and US\$100 million per year¹⁰, and growing at 40% to 60% annually. However, due to the complications of the Russian economic reality, it is difficult to verify these numbers.

The Russian offshore software development industry is roughly a half a decade younger than that of India and Ireland. The three major centers of Russian offshore software development are Moscow, St. Petersburg, and Novosibirsk. Moscow State University, St. Petersburg State University, and Novosibirsk State University are, respectively, the top sources of programmers for each. Perhaps to bolster their competitive edge with Moscow, St. Petersburg and Novosibirsk have established a consortia, “Fort Ross Information Technology Services” and “Siberian Information Technologies Center (SibIT),” respectively, to promote their local software industries. To a lesser extent Nizhny Novgorod, Yekaterinburg, Sarov, and Perm have important software industries. There are also a number of software development firms located outside of Russia but in the former Soviet Union, in places such as Minsk (Belarus), and Kiev (Ukraine).

In addition, there are two “Open Computing Centers” (OCCs) setup in Sarov and Snezhinsk by Los Alamos and Lawrence Livermore laboratories, respectively. These OCCs have been created under a joint American-Russian program called the Open Cities Initiative that is intended to develop commercial opportunities for Russian scientists and engineers living in “closed nuclear cities”. These cities are special restricted zones, which in the past were secret and completely off-limits to foreigners. Residents of these cities participated in advanced military research and development projects, and were provided with some of the best living conditions and educational opportunities in the former Soviet Union. These cities contain thousands of highly qualified engineers and scientists, and the OCCs provide turnkey resources for software development, mathematical modeling and graphics applications. However, there are still many difficulties and challenges to working in these cities. For example, foreigners need to apply 45 days in advance for permission to enter the cities.

Most offshore software development companies fall into two categories:

- Those with 50 to 300 programmers partly or fully foreign owned or 100% Russian owned but which do most of their work for foreign clients as contractors. These organizations often have well developed management structures and (in the case of contractors) sales and marketing organizations.
- Those with 10 to 20 programmers doing smaller jobs and getting their contracts through friends and acquaintances abroad within the Russian diaspora. Most of these organizations keep much lower profiles and many are not even registered as official companies.

¹⁰ There are no exact statistics on this size of the market. Most estimates are based on estimates of the number of people working in the industry (5,000 to 8,000) multiplied by estimates of the average revenue per head of OSD organizations (\$600 to \$1,500) with the two factors being inversely relative to each other (when using a higher estimate of people in the industry, a lower estimate of revenue per head is used).

A number of U.S. companies have set up development centers in Russia, and have reported excellent results. These include:

- Intel, which started in 1993 by contracting 10 programmers, now has its own facilities and a team of approximately 200 software developers, with announced plans to expand to 500. This team is responsible for the Intel Performance Library Suite, a set of programming libraries for signal processing, speech and character recognition, image manipulation, and linear algebra and fast fourier transform functions. These libraries are publicly available at <http://developer.intel.com/software/products/perflib>.
- Motorola, which started in 1993 with a small group of programmers, now has almost 200 software engineers working as part of its global software manufacturing program.
- Sun Microsystems, which has been active in Russia since 1989, now has a “Sparc Technology” center with approximately 300 programmers through a partnership. These programmers are involved in the development of new software and worldwide support of existing products.

Other well-known companies developing software in Russia include IBM, Boeing, and Nortel, as well as hundreds of less famous but large software and technology companies.

All of these companies have reported similar findings in their work:

- The projects are all generally viewed as successful and the company has chosen to scale up their research and development teams in Russia.
- Russian research and development and software development centers are ranked on par with U.S. and Indian centers.
- Cost savings exist, but are not the primary reason for the success and growth of their Russian software development teams.
- The key advantage of the Russian development centers, and the reason for their success are the strong technical capabilities (especially in the areas of mathematics and fundamental sciences) and innovative approaches of Russian professionals.
- Intellectual Property rights and security have not been issues.
- Taxes and bureaucracy have been issues for those companies which have followed the Ownership model of offshore development.

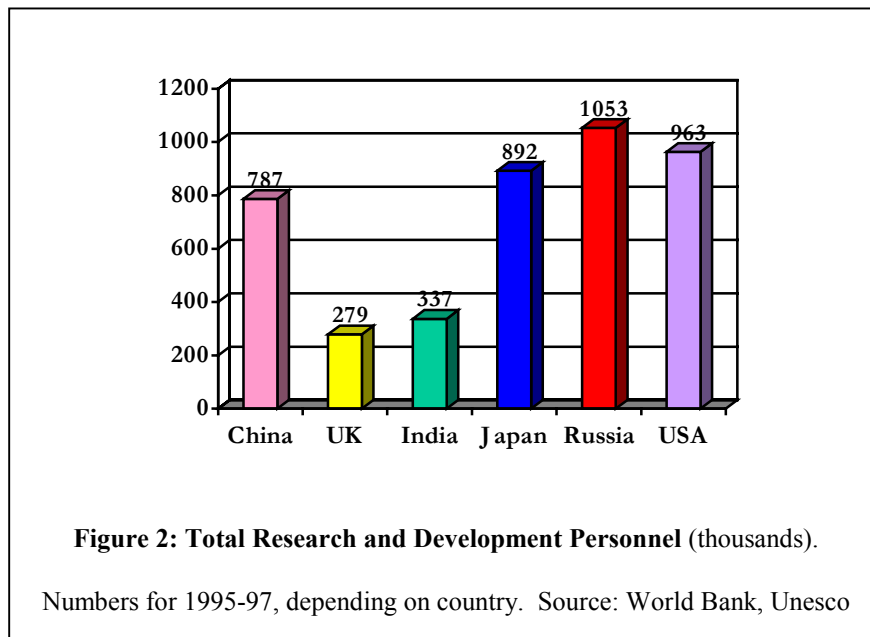
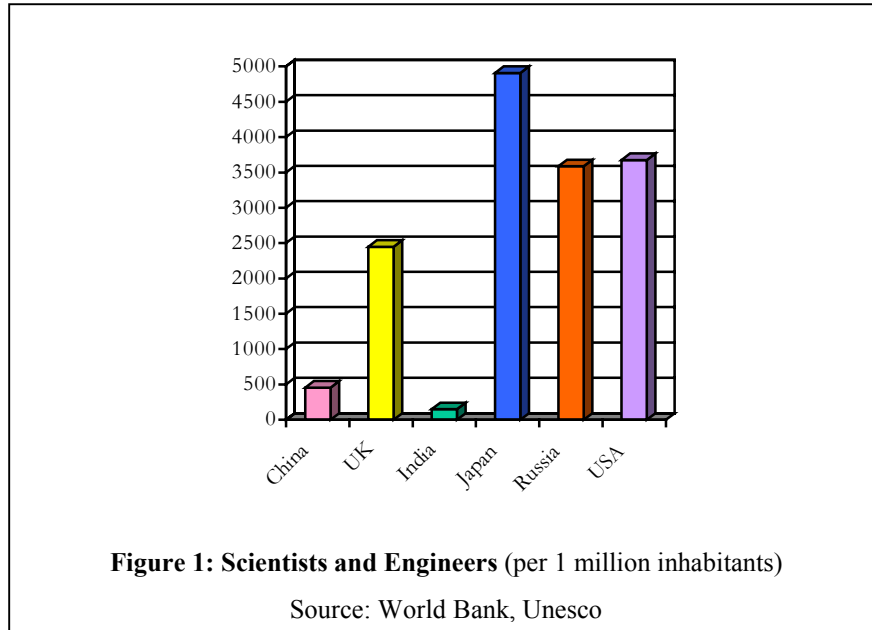
Based on their experience, following is a more general overview of the benefits and disadvantages of Russia in comparison to other major offshore software development zones.

As noted previously, there are two very different models for offshore development, “ownership” and “contracting”. These benefits and drawbacks have differing impact and implications depending on the model chosen.

Strengths

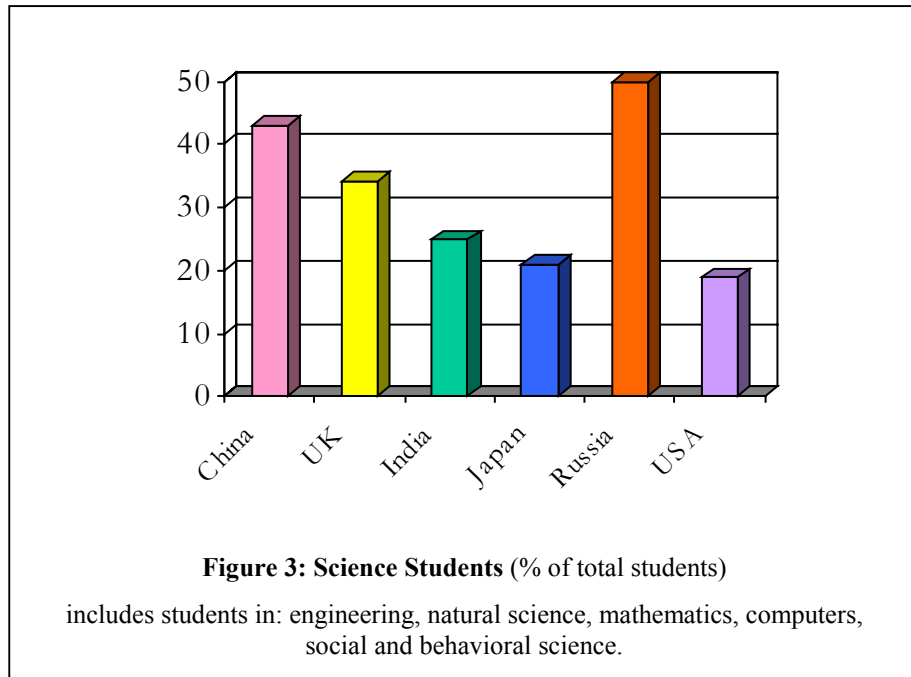
Russia possesses a number of characteristics which provide strong benefits for organizations that require software development resources.

- **Technical Skills, R&D Experience and Education:** Russian universities have been producing outstanding engineers, scientists, mathematicians, physicists, and other technical professionals for decades. These are people who have not been doing software coding, but have been working in complex R&D projects over the last thirty years. As a result of the Soviet centrally planned economy and focus on national efforts towards technology development, Russia is a society with a highly educated and technically skilled population with a national focus on research and development activities:



Many highly educated engineers who have been working on complicated projects in the military, nuclear and space programs are also excellent programmers who are able to apply their analytical skills to new projects. One critical advantage which this provides is strong background and experience with multiple disciplines which cut across different technologies. Russian engineers however, have twenty to forty years of experience in building complex projects such as satellite communications systems, nuclear power stations and electrical control systems, large gas pipeline control and monitoring systems, and similar large scale projects. Included in these specialties are specialized software engineers and programmers who emerged from other technical backgrounds.

Despite difficult times, Russian universities and institutes still produce well-qualified graduates, especially in the areas of fundamental sciences.



Today, a new generation of young Russians is winning international recognition with their technical and engineering skills. Some examples of recent awards:

- 51st Intel International Science and Engineering Fair**, Detroit, May 2000
<http://www.sciserv.org>
 Sergey Tischenko, Russia - First Grand Award in Math, Intel Fellows Achievement Award
 Students from Russia, Kazakhstan and Belarus presented 5 projects in the Category of Math. They dominated the category winning one 1st, two 2nd and two 3rd place awards.
- 24th ACM International Collegiate Programming Contest**, Orlando, March 2000
<http://acm.baylor.edu/past/default.htm>
 Sixty teams of students from 2,400 teams representing universities and colleges in six continents. World Champions - St. Petersburg State University
- 25th ACM International Collegiate Programming Contest**, Vancouver, March 2001
<http://acm.baylor.edu/past/default.htm>
 Sixty teams of students from 2,400 teams representing universities and colleges in six continents. Again -World Champions: St. Petersburg State University. Also:
 3rd Place: St. Petersburg Institute of Fine Mechanics and Optics.
 7th Place (for reference): Massachusetts Institute of Technology (MIT)
 14th Place (tied with others): Moscow State University and Ural State University
 29th Place: (tied with others, including Caltech) Southern Ural State University
- 12th International Olympiad in Informatics**, Beijing, China, September 2000
<http://www.ioi2000.org.cn/>
 Teams from 72 countries participated.
 1st place – Russia (4 Gold Medals from 23 total, more than any other country).

In Russian universities, computer sciences is one of the most sought after degrees because students realize that there are an abundance of jobs open in this area. In addition, many Russian software programmers are self-taught, partially explaining their reputation as hackers who can “think outside the box”.

- Experience With Complex Projects:** Russian engineers, scientists and programmers have been engaging in large scale complex projects for twenty to forty years which cut across technology disciplines. Russia is one of the few countries in the world capable of producing space stations, global radio, microwave and satellite communication systems, nuclear submarines and surface vessels, nuclear power generating stations, an electrical distribution grid covering 9 time zones, and other feats of modern engineering. While the changes in the Russian economy have made such grandiose projects impractical now, the engineering knowledge and experience remains. In fact, the changes in the Russian economy now mean that knowledge and experience is accessible for other projects, such as software development. None of the other major centers of offshore software development in the world have as many qualified engineers and software development with experience on such complex projects. Indian programmers, for example, do not have such wide experience with different technologies: their experience is typically limited to working in large software development factories. This experience provides Russian engineers and programmers with more breadth of experience and the ability to think laterally during problem solving.
- European/Western Culture:** Russian culture is much closer to the culture of the main markets of offshore software development - western Europe and North America - than its main global competitor, India. Russian music, art, food, dance, architecture, society, fashions and lifestyle are similar to that of the West. Having a closer cultural link helps reduce some of the problems that result from teams with differing cultural backgrounds working together. It also means that Russians can better understand the subtle cultural and esthetical issues in software human interface design for a western market.
- Location:** Western Russia is a 3 hour flight from most of Europe and 9 from the United States. This close proximity to Europe and only 8 hour time difference from the U.S. east coast give Russia an advantage for communications and coordination. Calls can be made during the normal working day simultaneously in western Europe, America and Russia. Some Russian companies use a later working day to provide full overlap with Central European Time and better overlap with U.S. time zones.
- Labor Costs:** One of the main benefits of tapping into Russia’s offshore development capabilities is the relatively low labor cost when compared to similar specialists in other markets. Figure 4 gives an idea of the prevailing wages for certain categories of IT professionals.

Figure 4: Average Salaries in Russia

	Experience		
	< 2 years	> 2 years	Management
*Gross Pay	\$300 - \$500	\$600 - \$1500	\$1500 - \$3000

*Many programmers are paid in cash and are quoted a “net” pay amount (net pay = gross pay – 13%). Source: Kelly Services Moscow.

Wages are generally higher in Moscow and Saint Petersburg than in regional cities. Additionally, foreign companies tend to pay higher salaries than local Russian development centers. The lower end of the range below would be for Russian development centers where English language skills are not essential. The upper end represents wages at western-run offshore centers where strong English skills are required.

- Availability of Stars:** Russia has produced a number of experts in various fields throughout history. Information technology stars have earned a place next to those in physics, math, space exploration, and the cultural arts. These creative talents have also become visible in the U.S. where many Russians have been at the core of software development for years.

Because of the changes in the Russian economy, many very bright minds who have been working in the government military/scientific/industrial complex are moving into the labor market. While this process has been happening for many years, it is far from finished. In more developed markets such as India, many of the best programmers are already employed. Russia is less penetrated by Western companies than China/India and the domestic industry is less developed, resulting in higher availability, lower competition, and better choice of talent.

Weaknesses

Although Russia is developing rapidly, a number of fundamental drawbacks remain:

- **Experience in Management of Offshore Software Development Processes:** Russia is just starting to enter this market, and lacks experienced managers at all levels of the process from top management to junior project managers. Companies in other countries have spent years building and refining organizational structures to ensure consistency and quality of software development processes, and Russian organizations are only starting on this journey. While they have the benefit of learning from the experiences of others, mistakes will still be made

Carnegie Mellon University's Software Engineering Institute has a system of measuring and certifying the maturity of an organization's software development processes¹¹ commonly called CMM. Of the 160 organizations that have publicly disclosed their certification level (from 1 to 5, with 5 being the best), none are Russian. Of the 39 organizations that have achieved level 5 certification, 21 are based in India¹².

While there is a large population of programmers/developers in Russia, the number of skilled project managers is still less than needed. In some cases foreign-owned development centers have brought in their own managers for foreign offices. More recently, Russians returning from working for IT companies abroad are increasingly being selected to run offshore software development centers.

This disadvantage can be reduced in two ways:

- For companies who have this experience in-house: by following the Ownership model of offshore software development, and sending experienced managers to implement and train local managers.
 - For others: by working with contractors who have more experience in software development, have documented business and project management procedures, or have some form of recognized (i.e. ISO or CMM) certifications.
- **Language:** Most of the other major offshore software development zones are English speaking. Naturally, not every software developer on a project needs to speak English. Ideally only the project managers need to communicate with clients in English. However, when there are more people within the team who speak English there is likely to be a higher level of communications and understanding. This issue means that project management and communication skills of top managers in Russia are critical.
 - **Inaccessibility:** The Russian government has succeeded in maintain relatively strict control for visiting Russia. Citizens of most western countries will need a visa, and while it is not difficult it does required some advanced planning and is generally an extra administrative burden that travelers to Russia will face. Travelers to many other countries, which provide similar services, do not require visas. So an organization contracting software development services from India will be able to visit the contractor on short notice, whereas visiting a Russian contractor will need to be planned at least a week in advance.
 - **Bandwidth Costs:** Russia has comparatively high cost of bandwidth, which is an essential element in communications for offshore software development. These costs are falling, but they still remain higher than communication costs in other offshore software development zones. This will affect companies choosing either the "Ownership" or "Contractor" model.
 - **Lack of certification organizations:** These organizations provide consulting, training and finally certification in ISO and CMM standards. Russia has no organizations, which provide CMM certification, and very few providing ISO certification. This lack of expertise will slow the speed at which organizations will be able to catch the rest of the world.

¹¹ For more information on SEI and CMM, see: <http://www.sei.cmu.edu/managing/managing.html>.

¹² From http://www.sei.cmu.edu/sema/pub_ml.html, SEI's list of publicly declared maturity levels. For alternate figures, please see endnote #8.

- **Marketing Capability:** A lack of experience puts Russia at a disadvantage. Most large Indian companies already maintain sales and marketing offices in America and have established themselves. In addition, the Indian Diaspora is very established in software development companies and departments around the world, providing a direct source of contracts. Russian companies are moving quickly to establish offices in their target markets, and the Russian Diaspora is also establishing itself quickly. This does not affect companies using the “ownership” model. This mainly affects the Russian contractors themselves, and their clients for whom it may be less easy to find and communicate with qualified contractors.
- **Legal Challenges:** There are many legal issues in the areas of intellectual property, export and import, taxation, labor laws, company registration and reporting, and currency control. Some of these issues are applicable to only the Ownership or Contracting models, others are applicable to both. These issues will be dealt with in more detail later in the next section of the whitepaper.
- **Lack of an industry association:** NASSCOM, the Indian association of companies involved in offshore software development, has been instrumental in lobbying the Indian government for favorable tax and regulatory changes. It also undertook campaigns to promote India throughout the world. Most importantly for the clients of these Indian member firms, it organized an industry effort to improve software development quality and business processes in India. As a result, most CMM level 5 certified companies are located in India. NASSCOM also provides reference information and support that helps American and other clients work more easily and effectively with Indian companies. While such an industry associations are now being formed in Russia, it will take some time before the efforts produce results.

Legal Framework of Offshore Software Development in Russia

Legal issues will be an important part of a company's decision on how to work with Russian software developers. It has been pointed out above that the main models of structuring an offshore software development project are:

- (i) establishing business presence in Russia; or
- (ii) contracting an existing Russian software development firm (the "contracting model").

The legal consequences of using each of these models will be considerably different. While the following information should not replace legal advice specific to each company's individual situation, it will help you to understand the issues.

Overview

One of the principal advantages of establishing a presence in Russia for a software development company is the ability to exercise a greater degree of control over the production process. The presence in Russia through a branch, representative office, or subsidiary Russian legal entity allows a foreign company to overcome the risk of uncertainty about skills and capabilities of potential sub-contractors. In addition, a presence in Russia allows foreign companies to put in place structures that respond to their particular needs and enable them to better control software export procedures and intellectual property issues associated with the development of software.

Conversely, a presence in Russia entails much greater administrative burdens under Russian accounting, tax, labor law, and other legal requirements. Software development activity through a legal presence in Russia may also generate, in some circumstances, liabilities for other Russian taxes such as corporate profits tax, value added tax (VAT), payroll taxes, and a tax on turnover. Under the contracting model, many of these legal issues are not relevant.

The contracting model minimizes a foreign company's exposure to Russian laws, regulatory schemes, and taxes. This model also avoids the considerable costs of setting up and maintaining a presence in Russia.

Certain legal issues pertaining to the transfer of valid property rights in software apply to both models of offshore development. Since the software produced in Russia must be transferred out of Russia under either model, applicable restrictions on export should be considered in all cases. Russian import regulations also may be relevant if a foreign company needs to provide the onshore programmers with specific equipment or software necessary for a particular assignment.

Accordingly, the following Russian legal issues will be outlined in this section:

- Establishing a legal presence in Russia.
- Taxation.
- Labor Law issues.
- Property rights in software.
- Movement of software and hardware to and from Russia.

Although these are the primary issues that should be taken into account when considering offshore software development operations in Russia, this is not an exhaustive list and additional issues may depend on particular circumstances. The following brief discussions of these topics are provided for background purposes only; specific legal advice should be sought for particular projects.

Establishing a Legal Presence in Russia

Types of Legal Presence

If a foreign company decides to establish its own software development operations in Russia, it could employ any of the types of corporate structures discussed in this section (or some combination of them). However, the tax and legal consequences of these structures vary significantly.

(i) Branches or representative offices

Russian law allows foreign company's to establish branches and representative offices in Russia. Under Russian law, the principal distinction between branches and representative offices is that only branches are authorized to conduct commercial activity – representative offices are supposed only to “represent and protect” the interests of the foreign entity in Russia. In practice, however, many representative offices in Russia undertake commercial activities, and the authorities rarely, if ever, have challenged a representative office for doing so.

Both representative offices and branches of foreign companies must obtain accreditation from an appropriate government agency. They must also register with the Russian tax authorities even if they will not have taxable income in Russia.

(ii) Subsidiaries (wholly-owned or joint ventures)

Russian law authorizes the following types of business organizations, any of which can be used by foreign companies for their operations in Russia:

- Joint Stock Company (“JSC”);
- Limited Liability Company (“LLC”);
- Full, Limited or Mixed Partnerships.

JSCs may be either closed JSCs, in which existing shareholders have pre-emptive rights on share transfers by other shareholders, or open JSCs, the shares of which are freely transferable.

The minimum charter capital required for formation of a JSC or an LLC currently is 100,000 rubles (or about US\$ 3,000). Corporate governance of LLCs is somewhat more simple than governance of JSCs, but entities of both types are subject to identical tax, accounting, and currency regulations.

(iii) Joint activity agreements with its Russian partners.

Russian law also authorizes the formation of simple partnerships, or joint activity agreements (“JAA”) as they are commonly known. A JAA does not create a new legal entity, but is merely a contractual relationship among the parties. JAAs are pass-through entities for Russian tax purposes. A JAA requires a Russian participant, so they can be used only when the foreign company plans to co-operate with a Russian entity. Foreign investors rarely use JAAs for their activities in Russia.

Incorporation and registration procedures

Incorporation of a Russian legal entity with foreign investments requires registration of the entity within the State Registration Chamber under the Ministry of Justice of the Russian Federation and with the local registration chamber for the area in which the headquarters of the entity will be situated. The incorporation procedure normally takes two to three months, but the time may vary depending on the region. Local consultants often may accomplish the process in much less time, but their methods of doing so may raise other problems for U.S. entities. After incorporation, a new legal entity must register with the tax authorities and other governmental agencies before it can become fully operational.

Choosing a Branch or a Subsidiary for Software Development

In most cases, a U.S. company that wants to do software development in Russia should do so through a branch (or representative office) rather than a Russian subsidiary. From a management standpoint, the administration of a branch is much simpler than administration of a Russian legal entity. From a tax standpoint, a U.S. company that forms a subsidiary that will only perform software development activities for the company to use outside of Russia will incur Russian taxes that it possibly could avoid if it conducted those activities through a branch. Perhaps most importantly, if software development is performed through a branch, the resulting intellectual property rights are owned by the foreign company that set up the branch rather than a Russian company. If a Russian subsidiary owns the intellectual property rights, the foreign company will face the complications (and tax consequences) of acquiring those property rights. A branch of a foreign entity also has greater flexibility under Russian currency regulations, although those regulations have been easing for Russian entities as well.

Taxation

Part I of the Tax Code of the Russian Federation (“TCRF”), which covers general and procedural issues entered into force on January 1, 1999. Part II of the TCRF dealing with VAT, excise tax, personal income tax, and some other issues, entered into force on January 1, 2001. It is not clear when the chapters of the TCRF dealing with corporate profits tax and other taxes will be adopted. In the meantime, issues not covered by the TCRF continue to be regulated by existing laws and regulations.

(i) Corporate Profits Tax

For Russian legal entities, the corporate profits tax is fairly straightforward – they are taxed on their worldwide income. The Federal corporate profits tax rate is 11%, regional authorities have the right to impose additional profits tax at the rate of up to 19%, and local governments may impose profits tax at the rate of 5%. The combined corporate profits tax rate therefore may be as high as 35%, although many local governments have not (yet) imposed the permitted local portion of the tax. Some regional governments have reduced the regional portion of the tax, although normally only for new investors making very large investments in the region.

Branches and representative offices of foreign companies that conduct taxable commercial activity in Russia are taxed on the income generated from those activities. The tax rates for branches and representative offices are the same as those for Russian legal entities.

Perhaps the most significant remaining problem with the Russian tax system is the limited deductibility of several normal business expenses for the purposes of calculating the profits tax. The expenses subject to limitations include interest, advertising, and training.

Since 1999, Russia has had transfer-pricing rules that allow the tax authorities to re-calculate the profits tax due from a taxpayer if the taxpayer sells its goods or services at prices which vary too far from market prices. These transfer-price rules are important for foreign entities that establish Russian subsidiaries for software development purposes because they require the Russian subsidiary to charge its parent “market” prices for its services. In many cases, of course, determining the market value of software development services will be anything but an exact science.

(ii) VAT

Russia imposes VAT at the rate of 20% on most of goods and services sold in Russia. Because exported goods and services are exempted from VAT, software development services provided to foreign purchasers by Russian suppliers should not be subject to VAT. Software development conducted by a foreign company for its own benefit in its Russian branch or representative office falls outside the Russian VAT system. Despite the exemption from VAT for exported goods, the administrative procedures for obtaining this exemption have been so difficult that many businesses ended up paying VAT on exported goods. Those procedures generally have not hampered the VAT-free export of services.

(iii) Unified Social Tax

As of January 1, 2001, employers in Russia (both Russian and foreign legal entities) must pay the unified social tax ("UST") based on the salaries paid to their employees. The UST is imposed at regressive rates, starting out at 35.6% and falling to a rate of only 5% on annual income in excess of about US\$ 22,000. The UST is a significant additional cost of hiring employees and doing business in Russia, although it is a significant improvement over the system that existed through 2000.

(iv) Other Taxes

Russian law provides for a number of other taxes applicable to both Russian and foreign legal entities operating in Russia, most notably the Road Users Tax which is levied at 1% of a company's turnover. Property taxes and several other taxes are generally insignificant, particularly for the software industry.

(v) The U.S.-Russia Double Tax Treaty

Russia and the U.S. have signed a double tax treaty that provides a number of benefits to U.S. companies that have operations in Russia. Perhaps the most important potential benefit for U.S. companies doing software development work in Russia is the protection from Russian profits tax for research and development facilities. A U.S. firm can establish a branch or representative office in Russia to conduct software research and development without the activities of that operation being subject to Russian profits tax. This benefit is not available, however, to Russian subsidiaries of U.S. companies, even though the work carried out at the subsidiary is purely research and development.

Labor Law Issues

One of the significant advantages of the contracting model is that foreign contractors avoid exposure to the Russian labor laws. Although various drafts of a new Labor Code have been considered in the Russian parliament for quite some time (and significant changes are very probable in the year 2001), Russian labor laws have not been significantly changed since the Soviet era. Even so they provide greater protection for employees than laws in most developed countries.

In particular, procedures for hiring and firing employees are highly regulated and violation of such procedures may involve administrative liability. Branches and representative offices of foreign companies in Russia as well as Russian legal entities shall comply with the requirements of the Russian labor law. Also, after contracting with a particular Russian developer firm for a period of time a foreign company may want to move to the ownership model and this might involve rehiring of the personnel of a Russian company, which also has to comply with the requirements of the Russian labor law.

Proper formalization of the labor relations with employees is also important to ensure that a valid title to developed software will belong to the developing company.

Property Rights in Software

Legislative Framework

There are still a lot of misgivings about the protection of intellectual property rights in Russia. In fact, although the enforcement mechanisms still remain relatively inefficient, the legislative framework providing protection of various intellectual property rights has been in place for many years. Primary legislation governing the intellectual property rights relating to software consists of the Federal Law on Copyright and Related Rights (the "Copyright Law") and the Federal Law on the Legal Protection of Computer Software and Databases (the "Software Law"). In general, the Copyright Law protects software as a literary work and provides for broad-based civil remedies against infringement, while the Software Law acts to expressly extend copyright protection to software.

Under the Copyright Law, a copyright is divided into two components: property rights and non-property rights. Property rights basically encompass the right to use and dispose of a copyrighted object (for the purposes of this overview we are concerned with one type of such copyrighted objects - software), such as the right to sell or copy the software. Non-property rights include the right of the author to be recognized as such; the right to insist on authorship recognition in the software; the right to publish the software; and the right to protection of the integrity of the software (including the name of the software, from any changes that can damage the reputation of the author).

This differentiation can raise important potential issues for purchasers of software developed in Russia. Specifically, while property rights can be transferred, non-property rights are not alienable. In fact, the enforceability of a waiver of non-property rights to software is questionable at best under the Russian law. As a result, the risks to a purchaser vary from the author's ability to require that his name be recognized in the software to an ambiguous right of the author to resist changes to the software on the basis of protection of his reputation. The novelty of this area of law and the lack of court guidance on these issues contribute to the lack of clarity as to the severity of these risks.

It should also be noted that copyright protection for software arises from the moment of its creation, without need for government registration. Nevertheless, the Software Law provides for the possibility of registration of a software copyright. This registration provides the owner of the copyright with a higher level of protection and facilitates demonstration of the authorship of the software. Currently, registration occurs with the Russian Agency for Patents and Trademarks ("Rospatent"). The registration of software, however, does not preclude claims for copyright infringement against the registered copyright holder. It does, though, shift the burden of proving authorship to the claiming party.

Copyright protection

Under Russian civil law, the owner of a copyright may claim from the breaching party the following remedies:

- (a) restoration of the status that existed prior to the copyright breach and cessation of actions violating, or threatening to violate, the copyright;
- (b) compensation for damages, the amount of which includes the sum of the profits received by the violating party and lost profit to the party whose rights were violated;
- (c) payment by the violating party of a penalty to be determined at the discretion of a court of law, or of an arbitration tribunal or a mediation board, amounting to a sum ranging from a 5,000-multiple to a 50,000-multiple of the statutory minimum monthly wage (approximately US\$18,500 to US\$185,000 at the current exchange rate); copyright holders can resort to this procedure as an alternative to receiving compensation for losses; and
- (d) in addition to compensation of losses or payment of penalty, a fine may be imposed, at the discretion of a court or an arbitration court, amounting to ten percent of the sum awarded by the court for the benefit of the plaintiff, with the fine to be paid to the budget of the Russian Federation.

A bona fide purchaser of a copyright will have a claim of action against the seller, pursuant to which the purchaser could claim compensation in the amount of the purchase price (under the unjust enrichment principal) or, if the seller misled the buyer on the validity of the title, a claim could be brought for compensation of all damages incurred due to the invalidity of copyright.

Copyright protection for foreign copyright holders

Protection of copyright on software developed outside of Russia is governed by the Universal Copyright Convention (the "Convention"), to which a number of Western countries are party, including the U.S. Essentially, the Convention extends the same copyright protection of published and unpublished software available to copyright holders in a member country to copyright holders in other member countries. For published software, the Convention requires that the work is marked with the symbol "©" accompanied by the name of the copyright holder and the year of first publication, placed in a manner and location as to give reasonable notice of the copyright.

Additionally, Russian legislation recognizes the authorship rights in accordance with the material provisions of the law of the country where the software was created. For example, if the relevant foreign law permits the recognition of a legal entity as the author, Russian legislation requires the recognition of such authorship.

It is also possible for a foreign copyright holder, looking for additional security for its copyrights, to register these copyrights in the Russian Federation pursuant to Russian legislation. While this procedure can be somewhat time-consuming and document-intensive, it would likely improve the ability of the foreign copyright holder to enforce its rights in the Russian Federation.

Copyright enforcement

Enforcement of a copyright, whether a copyright registered in the Russian Federation or a foreign-registered copyright, can only be conducted within the court system of the Russian Federation.

Copyright Transfer

As discussed above, only property rights of software are transferable. Thus, the author of the software always retains his non-property rights. Property rights to software created in the course of employment under the assignment of the employer belong to the employer, unless otherwise provided for by the employment agreement.

Generally speaking, there are two approaches to the transfer of a copyright: (1) a copyright assignment agreement, under which all property rights to the copyright are transferred to the assignee; and (2) copyright licensing, which provides for the transfer of only a certain part of the property rights to the copyright to the buyer. An assignment agreement relating to registered software is valid only following its government registration.

A major problem associated with the transfer of a copyright, particularly for software, is the validity of title on the software. In this respect, a non-Russian company seeking to obtain software developed in Russia has several options:

- (a) To establish a joint venture for development of the software and consequently to purchase the products from such a company. This option provides a foreign company with reliable and valid title on the software products to be transferred if the foreign company has sufficient control on the activities of the joint venture.
- (b) To buy software developed under contract by a Russian software development company. In order to ensure the validity of title obtained under this option, a foreign company has to pay particular attention to the origin of the software. Specifically, whether this software product was really developed by the employees of this company and to the conditions of the employment agreements for the programmers who created the software products will directly impact the validity of copyright and its transfer. For instance, under Russian law, an employer may allow an employee to retain all or some of the property rights to software under his employment contract (in addition to non-property rights that cannot be alienated). Thus, it is important to review the relevant employment agreements to ensure that this is not the case.
- (c) To buy software from a software reseller that has purchased these products from independent freelance programmers or other software development companies. This option has potentially the highest risk of title invalidity due to the fact that it is rather hard to track the origin of the authorship and the validity of transfer of the title on the software from the author (original owner) to the reseller. In Russia, a foreign company would need to carefully check all prior assignment agreements for the software in order to ensure that the title was transferred from the original owner of the copyright to the reseller in full, that the assignment agreements were properly registered, and that the purported original owners can provide sufficient proof of the authorship of the software.

Movement of Software and Hardware To and From Russia

The degree of a foreign company's exposure to Russian import and export controls will not depend primarily on the form of the organization of the software development activities in Russia (whether subcontracting or with the foreign company's own operations). Instead, the critical factor will be the features of any software and hardware that will be moved across the Russian border in connection with the project. In particular, any encryption software or hardware, or any software or hardware containing an element used for encryption is subject to strict import and export regulations.

Many technologies and data, as well as hardware, used in the process of software development might be regarded by the Russian State authorities as "dual purpose" items. "Dual purpose" items include software, technologies, processes, know-how, and like items that potentially could be used for civilian and military purposes, or "could substantially contribute into the creation of a weapon of mass destruction, the means of its delivery, or other arms or military equipment." The Russian government has issued a list of dual-purpose items that is very extensive and includes a wide variety of hardware and software.

Import and export of dual purpose items is subject to special regulation by the Russian government and requires special registration of the Russian parties to the transfer with governmental authorities and sometimes the other side as well (for example, a U.S. company that exports certain items to Russia).

An important category of dual-purpose technology is encryption software, which is often important to preserve the confidentiality of software being developed offshore and sent back to the U.S. via the internet. In some cases, foreign companies may need to provide proprietary hardware or software to a software development operation in Russia.

Import of Software and Hardware into Russia

Certification and Licensing Authorities

Currently, there are two organizations in Russia authorized to control, certify, and license importation and the use of hardware and software: the State Technical Commission of the Russian Federation ("STC") and the Federal Agency of the Governmental Communications and Information ("FAPSI").

From a legal standpoint, certification of software or hardware with both STC and FAPSI is obligatory only when foreign hardware/software is both

- (i) designed for restricting public access to information, and
- (ii) will be used by state organizations dealing with state secrets.

In all other cases certification with FAPSI is optional. Accordingly, any software/hardware designed to restrict public access to information and used by any legal entity or individual for communication with a state body should be certified with FAPSI.

Pursuant to Russian law, the sale of services of information encryption, as well as the sale and/or distribution or servicing of technical means of information encryption requires a license. Therefore, in reality, the issue of STC or FAPSI certification of hardware/ software is not limited solely to those products that are destined for use by (or for communication with) state bodies dealing with state secrets.

FAPSI Certification and Licensing

A product requires certification with FAPSI if it is used for encryption or contains an encrypted component and will be used by or in communication with Russian state bodies dealing with state secrets. Encryption products or products with an encryption component subject to FAPSI certification may be imported into Russia only if an import license has been obtained for the product. Also, the

encryption product or the encrypted component, if intended for sale to a third party, must be licensed in Russia.

The requirement for an Import License or a License to Use (see below) is primarily a concern for the Russian subsidiary or contractor of a U.S. customer. However, indirectly, the U.S. customer may also be affected, if any of the required licenses are not obtained on time by the Russian company.

(i) Import License

After encryption equipment/software was certified with STC and subsequently – with FAPSI, the importer may apply to FAPSI for a license for import of encryption equipment and software into Russia (the "Import License"). The decision on issue of the Import License is made by FAPSI. However, the issuer of the Import License is the Russian Ministry of Trade.

The Import License can be (i) a one-time license (for one transaction), or (ii) a general license (for an indefinite number of transactions during one calendar year). As a rule, each type of encryption equipment/software, even if imported as part of one transaction, requires a separate Import License. However, in exceptional cases the state authorities may issue one general Import License for several kinds of encryption equipment imported under one transaction.

An Import License is not required if the encryption software is imported into Russia electronically rather than on recorded media or in any other "tangible" form, since the encryption software does not undergo customs clearance procedure in this case. The importer, nevertheless, is required to file an explanatory letter with FAPSI stating how the software was delivered into Russia and submit the encryption software for certification with FAPSI.

(ii) License to Use

The production, sale, or use of encryption equipment in the Russian Federation is subject to separate licensing by FAPSI (the "License to Use").

FAPSI should make a decision to issue (or reject) a License to Use within one month after the date of filing an appropriate application with FAPSI. However, in practice the review period may be extended, depending on the number of applications under consideration at FAPSI at any given period of time.

Finally, FAPSI is very suspicious of foreign encryption products and has, in general, a clear negative attitude toward foreign entities distributing such products on the Russian territory. Therefore, it may become a real problem for a U.S. company to certify its encryption products with FAPSI and to obtain a License to Use. A potential way out in this case may be to agree with the Russian recipient of foreign encryption products that it would secure certification of the products with FAPSI and obtain the License to Use in its own name.

Export of Dual Purpose Technology from Russia

Export controls will affect the U.S. company more than the Russian partner because failure to secure export permission will prevent the U.S. company, which has invested its money into the development of the software, from delivering the software to the market for which the software was developed.

Authority of Exportcontrol

In Russia, the Federal Service on Export and Currency Control ("Exportcontrol") is the state agency that oversees transfer of Russian dual-purpose items to foreign countries. Exportcontrol can recommend that dual-purpose items and other items that may be used for military purposes be prohibited from export from Russia.

Any Russian entity engaged or planning to engage in the export of dual purpose items may establish an internal program on export control and obtain accreditation with Exportcontrol.

Foreign recipient's obligations

Before a Russian entity can export a dual-purpose item, a foreign recipient must submit a written obligation to Exportcontrol that the dual purpose item in question will not be used for military purposes. Notably, Russian law permits the Russian Government to impose additional requirements and conditions on the export of dual-purpose items, including mandatory inspections of the foreign recipient by the Russian State officials on the use of the dual-purpose items received.

Russian entity's obligation to obtain a license

The Russian entity - owner (holder) of dual-purpose items must obtain an export license from Exportcontrol in order to export (or license) such items. Generally, the Russian exporter must obtain an export license for each export contract for a dual-purpose item. Exportcontrol may, however, issue a general export license, which permits export of a defined number of dual-purpose items to a specific foreign country/countries. The general export license however can only be issued to a Russian exporter that has implemented an internal program on export control and is accredited with Exportcontrol.

Currently, an export license is expressly required only for export of encryption products (software or hardware) and technical documentation and user guides for such products.

A Russian entity may temporarily export dual-purpose items without a license for purposes of demonstration (e.g., exhibitions). The exporter, however, must ensure that the items (i) are not transferred to any foreign entity, (ii) always remain in physical possession of the exporter, and (iii) are returned to Russia within a specified term.

Non-Dual Purpose Items - Exportcontrol Discretion

A Russian exporter may be required by Exportcontrol to apply for an export license even in respect of those items that are not included on the list of dual-purpose items. Such requirement applies if the exporter is notified by Exportcontrol or if it is believed that the exporter's regular items could be used for military purposes. This provision could potentially be used as a "catch-all", because it applies whenever there is a mere belief, rather than actual knowledge, that the exported items might be used for military purposes.

Liability for Breach of Export Rules

Punishment for violations of export control rules is severe, including a fine of the amount of the full value of the dual purpose items involved in the unlicensed transaction (including violation of the license terms). Moreover, if the violation is found to have caused "significant damage to political or economic interests of the Russian Federation," the violator entity may be deprived of the right to engage in export and/or import transactions for the period of up to three years. Finally, depending on the circumstances, the managers of the violating entity may be subject to an administrative fine of up to 100 times the minimum monthly wage (approximately US\$350) or even a criminal sentence and fine ranging from 300 to 1000 times the minimum monthly wage (approximately US\$ 1,000 to US\$3,500), or imprisonment of from 6 months to up to five years.

Issues to Consider for a Contracting Model

Many of the issues already discussed apply primarily to organizations who set up their own development centers within Russia (ownership model). However, the bulk of offshore software development work done today via the contracting model – where Russian companies and individuals provide development services for clients outside Russia.

This model is preferred route for most organizations because it is the most simple and has the lowest risk. In dealing with a Russian contractor, there are still some legal points which should be considered.

Firstly, in choosing a contractor, standard business practices should be followed to ensure choosing a reliable partner. Some Russian companies have offices outside Russia, and those companies are most

likely to be the easiest to work with. In this case most issues are similar to the legal and business issues in a standard international business contract and the Russian company's office outside Russia will be legally responsible for any breach of contract or damages.

In case the contract will be directly with a Russian company, a thorough examination by a reputable lawyer practicing in Russia is highly recommended, as Russian companies without any prior exposure to Western business standards often disregard important issues that may jeopardize the project and its future development. Due to the significant difference between Russian and U.S legal systems the contribution of a Russian lawyer to drafting or, at least commenting on a contract should not be underestimated. On the first approach, however, the U.S. company wishing to engage a Russian contractor, can obtain a general impression on the basis of the following information.

The contracting company should ascertain that their Russian contractor is in good corporate standing, i.e. is a legally existing legal entity and in possession of all required permits and licenses for all types of activity that the Russian company engages in. Currently, no specific license is required for software development. However, distribution or servicing of encryption hardware and software is subject to licensing. Russian legislation often changes quickly and unpredictably. Accordingly, the activity that is not subject to licensing today may require a license in the future.

Issues concerning the Russian company's title of the intellectual property developed by its employees and protection of this intellectual property from any potential challenge or claims of compensation were discussed earlier. Often Russian companies do not pay due attention to proper paperwork. The contracting customer would be wise to inquire about measures the Russian contractor adopted to ensure claim-free transfer of the developed product.

Some of the usual provisions in the contracts to which the U.S. company is accustomed in its home jurisdiction may be unenforceable under Russian law. In particular, this is true for non-competition covenants, indemnity provisions and representations and warranties, which are loosely worded. Although the validity or enforceability of any of the remaining provisions of any contract containing an unenforceable provision is unlikely to be affected, the provision itself may not serve its purpose. Therefore, any contract with a Russian counterpart should be drafted with a view that all provisions should be enforceable under Russian law, even if a foreign law governs the contract.

An arbitration tribunal rather than a court should be chosen as a dispute resolution body. Enforcement of a foreign arbitration award in Russia is possible under the New York Convention on Enforcement of Foreign Arbitration Awards of 1958. Enforcement of a decision of a foreign court, including any U.S. court, is not possible in Russia in the absence of an appropriate agreement between Russia and the majority of foreign countries on mutual assistance in legal matters.

* * * * *

As can be seen from the above, there are important legal issues that should be considered when a foreign company decides to develop software products in Russia. However, all the legal challenges discussed are manageable under current Russian law and there are no insoluble legal bottlenecks preventing successful development of offshore software development in Russia.

Case Studies

Relavis Corporation

Relavis Corporation is the developer of eBusinessStreams, the winner of the 2001 Lotus Beacon Award for Best eBusiness CRM Solution and the IBM Beacon Award for Greatest Business Impact. It is a collaborative eCRM solution comprised of: eSales, eMarketing and eService (for customer support and web self-service). Relavis eBusinessStreams is based on the IBM Application Framework for e-business and uses Lotus Domino, WebSphere, RDBMS, CTI and Text Analyzer, making it the industry's most comprehensive, flexible, customizable and open platform available.

The company became interested in outsourcing some of their project work to increase resources and reduce costs in order to provide a better product and deliver it faster to their customers. In early 2000, a Russian consulting company was selected to supplement their in-house programming effort. The initial set of work was done very well so they have extended the contract until the end of this year and probably beyond.

Relavis did most of the systems analysis in-house and provided specification and guidance to the Russian company. Approximately 70% of the programming was outsourced. The contractor started with two people working part-time, which gradually increased to eight full-time resources. Relavis found the contractor's technical skills very good in the programming languages and platforms they needed. They also found some of the programmer's analytical skills very good and leveraged them on some of the new analysis work as well.

Relavis provided the project management and worked with team leaders from each of the contractor's functional areas. Work was kept under control using status, project management and time sheet databases as well as Lotus Notes for the replication of the code developed and Lotus Sametime for live chat. Sametime was a huge help by enabling the R&D teams in the United States to not only have live conversations but also to easily "whiteboard" or share pieces of the application with their teams in Russia. The time zone difference allowed the development of Relavis products to be close to 24 hours a day. They did find data transfer at times to be slow but with the time zone differences large files were sent overnight.

Relavis has an American who has lived in Russia for many years coordinating the business there. Having someone in Russia managing the relationship facilitated the learning curve on both sides and potential communication and cultural difficulties were mitigated. The project has been judged a success and Relavis has plans to expand its Russian contracting arrangements in two additional areas.

The first expansion area will involve the use of additional contractors to reengineer one of their products under a unified modeling language. They will also be looking for help with some of the testing and quality assurance. The second expansion is in product localization. Relavis delivers their software in various languages and they will be looking to outsource this capability to a Russian company. Both these companies offer attractive economies of scale and a faster go-to-market for Relavis.

A further benefit has been the identification of Russia as a potential market for Relavis products. Customer relationship management is still a new concept in Russia and most companies have not invested in it yet. Relavis is translating their software into Russian to facilitate understanding by the Russian engineers as well as to facilitate marketing in Russia.

Relavis suggests doing your due diligence in the selection of an outsourcing partner. Even with a direct local presence, you need to have confidence and trust in the companies you work with there. It is further recommended that firms insure that the service providers have a good technology and services fit to their own operations. Relavis has found that it is significantly better to look for contractors that have a core competency on the services required than to work with more generic technology service

providers. With these provisos, offshore software development in Russia is a route Relavis recommends.

Motorola

The St. Petersburg Software Development Group of Motorola is a branch office of Motorola in Moscow and a local Russian entity. It employs 178 people with a further 56 working via a contractor. It is part of a Global Software Group, which has close to 20 development centers around the world.

Each of these centers specializes in three or four areas of expertise developing internal systems. The St. Petersburg center focuses on:

- Embedded software for operational systems and applications
- Behavioral models, simulation models and tools
- Embedded software for telecommunications
- Java technology for Motorola platforms.

Some other centers are much larger than the one at St. Petersburg. For example, in India, Motorola employs up to 700 developers in Hyderabad and Bangalore but these centers have been in operation much longer. The St. Petersburg operation has doubled in size in 18 months and aims to employ 500 people within the next three years.

Motorola started operating in St. Petersburg through subcontractors. It wanted to check that Russian software engineers could develop high quality products. Five projects were run and they were all judged to be successful. The company did not open its own wholly-owned center until June 1997 as it took some time to find the right facility. At that time, Motorola employed 44 employees with 29 contractors.

Motorola's decision to open a new center was based upon:

- Whether there were enough talented people in the locality;
- Presence of educational institutions;
- Cost of engineers;
- Attitude of the government;
- The company's market share in the country.

St. Petersburg has a high level of educational establishments and many new software engineers become available each year. The company therefore finds it very easy to recruit enough talented staff each year. This helps them start working on projects and develop new expertise very quickly. Nine percent of the company's staff have a Ph.D. and 79% have Masters degrees. The company continues to invest in the training and development of its staff, which averaged at 85 hours per person last year.

The company believes that its pool of contractors also provides it with a significant advantage as this consists of a group of people who have already been tested out on research projects.

Motorola also has close links with the universities in St. Petersburg and takes students on as paid interns. One percent of its budget is donated to university programs and it has opened three research labs in the universities.

The company believes that its contribution to the local economy and community is an important part of its business in Russia. Motorola does not employ any ex-pats and purchases equipment locally so that it helps build other local businesses.

The company finds that there are some tax and regulatory problems in owning its own center. It believes there should be VAT exemption on exported products and is negotiating with the Tax authorities over the definition of a 'software product'. Motorola also pays duty on imported software, which is substantial. There is also a lack of clarity in taxing electronic transactions.

Motorola has difficulty bringing telecommunications equipment into the country that is not certified according to Russian technical standards. Motorola tries to explain that it is good to expose people to

hi-tech equipment and that this is only being used for simulation and research purposes, but it can still take three or four months to process the necessary paperwork.

Neither intellectual property nor security have been issues.

The company is trying to buy a new plot of land to build a new center and is waiting for local government to providing all the support they need but progress has been slow.

Nevertheless, Motorola is satisfied with the results of its R&D activities in Russia, sees the process getting easier, and plans on doubling the size of its facilities over the next three years.

Directory of Companies Offering Offshore Software Development in Russia

This information has been organized in an online searchable database located at:

<http://russiansoftwaredev.eSolutions.ru>

This database includes basic information on companies located in the former Soviet Union who are offering offshore software development services. Companies who are also members of The American Chamber of Commerce in Russia are specially marked.

No attempt has been made to check the accuracy, capability or professionalism of any of the companies listed. It is assumed that anybody planning to work with one of these companies will conduct their own due diligence checks. Amcham membership is the only verified information within the database.

It is also intended to use this web site to provide new information, reports and case studies on the offshore software development industry in Russia, as it become available.

Contributors

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Reference Material

Below are listed some additional sources of information on this topic that may be useful. Please note that Amcham does not endorse or guarantee the accuracy of any of this information.

U.S. Foreign Commercial Service Reports:

Russian Market for Offshore Software Development
<http://www.bisnis.doc.gov/bisnis/country/000829RusSoftDev.htm>

Software Development in the Nizhny Novgorod Region
<http://www.bisnis.doc.gov/bisnis/country/001127softwareNN.htm>

Software Development In Novosibirsk, Russia
<http://www.bisnis.doc.gov/bisnis/country/001204software.htm>

Software Development in Russia: Fort Ross Project
<http://www.bisnis.doc.gov/bisnis/isa/000504soft.htm>

Other Reports and Information Sources:

McKinsey Global Institute Report on the Russian Software Development Industry
<http://mgi.mckinsey.com/mgi/pdf/softE.pdf>

(Indian Government) National Task Force on IT & Software Development
<http://it-taskforce.nic.in>

CIS-Software (Online database of Russian software products & companies)
<http://www.cis-software.de/en/>

“Immigration by Another Name” (Forbes article on Russian software developers)
<http://www.forbes.com/global/2000/1211/0325128a.html>

“The Russian Connection” (Inc. article on Russian software developers)
http://www.inc.com/articles/details/0,3532,ART817_CNT53,00.html

Moscow Times article about winners of ACM Computer Programming Championship
<http://www.moscowtimes.ru/stories/2001/03/14/051.html>